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The HIGH SCHOOL JOURNAL

Equipment Number

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THE HIGH SCHOOL JOURNAL

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NOW AS TO STANDARDS

By L. A. WILLIAMS
University of North Carolina

BUILDERS OF SCHOOLHOUSES should always be on the watch for objective standards by which to judge whether or not they are securing the best building possible. The makers of standards are rapidly working away at the problem to devise such standards. We already have the Strayer Engelhardt Score Cards, and a few others for both city and rural schoolhouses. Yet those who have used these score cards sense the inadequacy and incompleteness of such measuring devices. The practical schoolman will probably be interested in the point of view set forth in the accompanying discussions of building standards as a means of helping him to think clearly about the essential features he would have built into his new buildings.

The superintendent of schools at Janesville, Wisconsin, back in 1919 prepared what he called a set of "educational specifications" for school buildings in his city. His method in the discussion of Janesville's building program is the sort of thing a schoolman ought to have in mind when planning a building program; in general, the suggestion is, to have educational as well as architectural standards in mind when planning buildings. Among many other interesting things he says:

"Janesville is a manufacturing city, located in a rich agricultural region, and while the attendance from the rural sections will be increased somewhat by the attractiveness of better school opportunities, the greater increase by far will come from the houses of the people attracted to the city by reason of the very large increase in the manufactures.

"Officers of the General Motors Corporation have stated that due to the advent of their traction plant, the population will be increased to such a degree that within five years our population will have trebled or quadrupled. This suggestion is entered here because it is pertinent to have this radical growth in mind in all public building plans.

"It is now contemplated to have the proposed building house a senior high school composed of the sophomore, junior, and senior classes, present enrollment about 400; a junior high school composed of the 7th grades, the 8th grades, and the freshman classes, present enrollment about 400; and a vocational school with a daily attendance of about 200 including both full-time and part-time pupils.

"From the above data it would seem reasonable to expect that the new building would upon completion be called upon to accommodate 1,000 to 1,200 pupils and should have expansion possibilities to take care of at least 1,500. While additions might be made increasing the capacity to a still greater figure, it is not clear that either efficiency or economy is increased after the above figures are reached, and it might very well be much better in every way to go a considerable distance and begin the duplication of the plant.

"To the end we submit from present enrollment the following facts and figures for each of the departments in our high school. Presuming that the same relative proportions would hold true were the school three times its present size, i. e., 1,500 instead of 500 pupils, we have multiplied the figures for each department by 3, which may give a rough estimate of needed capacity for each department in order to adequately meet the demands made upon it.

"Since a certain amount of extra or laboratory work is required in connection with such subjects as the sciences and agriculture, and other subjects such as domestic sciences, manual training, and commercial work are given double time, we add sufficient time to allow for these and find that at present the high school provides for approximately 2,500 pupil-recitation periods of 40 minutes each, every day; or 312 recitation seatings each period of the present 8-period day. That is, of our present high school enrollment approximately 300 or 3-5 are engaged in class work at any or every period of the school day.

"The state requirements for vocational schools provide that 50% of all instruction should be vocational or prevocational and 50% academic.

"It is well to recall, too, that the fundamental principles underlying the junior high school idea call for a maximum of manual activities and a minimum of academic work for these years.

"Furthermore, it is desirable that full recognition

be made of the demand that the high school program provide for a well-balanced plan of study, work, and play in proper proportions and that all of these activities be provided for in such manner that they may be run concurrently and harmoniously.

"Ample provision to meet the growing demand for physical education for all must be included."

In 1921, the now famous school architect, Mr. Wm. B. Ittner, speaking before the National Association of School Accountants, set forth the following principles which should govern thought in planning a school building:

"The meaning of school building efficiency is maximum return on investment—in service. The greatest factor of all in schoolhouse planing is the skillful adaptation of enriched school facilities to the enriched and expanded modern school life. The ability of the plan to serve the educational program is the most important thing. This requires a combination of architectural ability and educational engineering so that instructional waste space may be eliminated by maximum use and non-instructional waste space reduced to a minimum.

"It is not possible to measure the efficiency of school buildings except in terms of service. Surely then we need some other method far more comprehensive and complete than the standard chart and candle of efficiency to bring out the real and fundamental merits of a school building plan—a method whereby the relative excellence of buildings may be readily recognized.

"Perhaps the principal causes of inadequate and unsuccessful buildings are:

"1. The selection of incompetent schoolhouse planners—architects who have very little knowledge of educational tendencies and consequently are unable to make intelligent surveys of local situations.

"2. The lack of unification of the educational plan and building plan. The *educational program must always be developed first* and serve as the beacon light and constant guide in the development of the building plan.

"3. The lack of sufficient foresight in developing plans for building programs. Altogether too many school communities in the country are limited in educational opportunities because of the patch-work and piece-meal methods of school building in the past. A forecast of from five to ten years is advisable when developing a comprehensive school building program.

"4. Lack of attention to such matters as adequate lighting, ventilation, maximum safety, circulation, conservation of space, and provision for expansion.

"5. Non-instructional waste-space. This is mentioned last because if the first four weaknesses are remedied, waste space will automatically disappear. The educational facilities would naturally be the most important factors to measure—whether or not they are adequate, well-proportioned, properly grouped and placed; next, the status of the plan with regard to safety, lighting, and aesthetic fitness, and third, the rating of its elasticity, ease of pupil circulation, and conservation of space.

"Buildings will need to be classified as to type and size, also into elementary and secondary groups. Then an agreement determining the definite standards by which the various component parts of a school building may be analyzed and judged may be necessary. This may be accomplished by a division into ten general classifications.

"1. The adaptability of the plan in meeting educational requirements.

"2. Safety. This should cover such matters as height, corridors, stairways, exits, and construction.

"3. Lighting and ventilation.

"4. Administration and accessory rooms, their area, location and arrangement.

"5. Auditoriums, their size, location, and interior arrangement.

"6. Physical education quarters, their size and grouping, their accessory rooms, and correlation with out-of-door recreational facilities.

"7. Classrooms, their size and distribution.

"8. Laboratory classrooms, their size and grouping.

"9. Pre-vocational and vocational quarters, their variety, size, grouping, and location.

"10. Site and architecture.

"The foregoing constitute the most important items to consider when measuring the efficiency of school buildings. All of them, except perhaps No. 1, are capable of reduction to certain minimum standards to which they must attain to be considered as fulfilling modern school requirements, and the ability with which they measured up to the last nine requirements would determine largely the merit of the plan in meeting requirement No. 1.

"There would be no difficulty then, after definite standards had been agreed upon, to measure the component parts of a given building and determine how closely they measured up to such standards. A certain number of points could be allowed for each classification, 1 to 10. The individual ratings could then be totaled, divided by the number of items, and the final result would represent the efficiency measurement in terms of service and upon the basis of 100 per cent."

Uniformity has its place as a feature of schoolhouse

planning but there is great danger that uniformity may become so cramping and so all-controlling that we shall forget the real purpose for which schoolhouses are built. Here, as in general school administration, the rule of procedure should be: "uniformity in essentials and freedom in details." The point of emphasis in judging schoolhouse plans ought always to be the needs of the school and community first and the rule of architecture second, always including both first and second.

STATE MEASUREMENTS OF THE PHYSICAL SCHOOL PLANT

By MISS BERTHA AUSTIN
University of North Carolina

ONE OF THE most helpful as well as satisfying methods of studying the physical plant of the school is found in the examination of the standard plans and score cards in the different state departments of education. Since most state departments of education deal largely with rural and county systems it would be expected that their measuring scales would apply largely to rural schools. Such is the case in the score of the states from which we have been able to obtain material bearing definitely upon the standardization of rural school plants.

An attempt has been made to summarize in a simple way the general requirements of the several states in the form of a sort of norm or score card without, however, assigning values to each item. More than 400 items were listed and from these a sort of minimum standard has been selected. This will serve as a basis from which to work and should be considered only as a rough outline summary of the 15 state requirements examined.

Following this tabulated statement some of the wide range and variations in requirements are examined:

I. SCHOOLHOUSE

1. *General Specifications*:

(a) Good foundation, sidings, roof and floor; well painted exterior or brick in good repair; walls plaster, ceiling tinted in soft colors—buff or green.
(b) One extra room for closet or store room and a library alcove.
(c) Porch or veranda covered by roof.
(d) Good steps—cement preferred.
(e) Windows with sashes on weights provided with locks.
(f) Chimney topped, out tile lining with air space between tile and walls of ceiling.
(g) Fire escapes.

II. HYGIENE AND EQUIPMENT

1. *Hygiene*:

(a) Unilateral lighting, or on left side and rear.
(b) Windows near to ceiling, glass area 1-5 to 1-6 floor area.
(c) Light colored shades that roll.
(d) For each pupil 220 cubic feet air space.
(e) For each pupil 20 square feet floor space.
(f) Adequate cloak rooms properly heated and ventilated.
(g) Study chairs or single patent desks of at least three sizes fastened to strips on the floor.
(h) Adequate heating and ventilating systems, such as Smith, Waterbury, Old Dominion, or other furnaces which bring in pure air and remove foul air from the room.
(i) Fly screens for all doors leading into school building and at least two windows.
(j) Pure water supply; covered water cooler with spigot and individual paper drinking cups or sanitary bubbler with proper plumbing attached.
(k) Enameled sink with drain pipe, wash basin, mirror, waste basket, paper towels and liquid soap.
(l) Coal bucket, shovel, floor brush, broom.
(m) Thermometer.
(n) First aid outfit.

2. *Teaching Equipment*:

(a) A good teacher's desk and at least two chairs.
(b) At least 25 linear feet of slate blackboard four feet wide and set from 26 to 30 inches from the floor, fitted with sanitary chalk trough.
(c) Good state map; at least six other good maps in case; suspended globe; weights and measures; good supply of bulletins and educative free materials.
(d) Textbooks—modern, in good condition, and in quantities to supply the needs of the pupils.
(e) All schoolbooks for the teacher's use.
(f) Supply of at least four types of primary material.
(g) At least two sets of supplementary readers for lower grades or classes—all basal texts.
(h) Good library; bookcase for each room with books kept in places properly labeled and library rules followed. Bulletin boards provided.
(i) Newspapers and magazines.
(j) An encyclopedia; an unabridged dictionary in good condition with stand or shelf.
(k) Household arts equipment for hot lunches; manual training and agricultural equipment.
(l) Talking machine with at least ten selected records.
(m) Musical instrument; community song books.
(n) National flag.
(o) Crayon, erasers, and pointers.
(p) Electric gong desirable. Hand bell or belfry allowable as substitutes.
(q) Clock.
(r) Telephone.
(s) Stereopticon.

3. *Decorations*:
   (a) At least four good pictures framed, carefully chosen and arranged.
   (b) Interior of room tastefully decorated.

III. Grounds and Outbuildings

1. Grounds
   (a) At least one acre, fairly level and smooth, well kept.
   (b) Garden well cared for and such as to encourage interest on part of pupils.
   (c) Ample playgrounds for supervised play.
   (d) Two good approaches to the house and walks to the outbuildings.
2. *Outbuildings*:
   (a) Adequate sanitary toilet facilities, if not already provided for inside.
   (b) One well kept outbuilding for fuel.
3. *Apparatus and Improvements*:
   (a) Sufficient playground equipment to encourage intelligent play.
   (b) At least four shade trees and shrubbery suitably arranged.
   (c) Flag four by six feet, flying weather permitting.

The total number of items listed on the score cards for the 15 states were 451; the largest number for any one state 44; and the smallest number 18; the average number per state, 30. In each instance special attention was given to schoolhouse specifications, grounds, and outbuildings; the requirements for teaching equipment, playground apparatus, and hygienic conditions were more varied, some states requiring the minimum for a school to get along with while the requirements of others were adequate for the superior mental, moral and physical development of the child under attractive, comfortable, and sanitary conditions.

The schoolbuilding specifications, that is, the foundations, roof, sidings, walls, exterior and interior, windows, and floor requirements were practically the same for each state. The lesser details—steps, porch, and extra room as closet or store room and library alcove were required in only a few instances. Other requirements were as follows: Lighting, unilateral or on side and rear, area from 1-5 to 1-7 floor space, some requirement by each state; two states, 220 cu. ft. air space and 20 sq. ft. floor space per pupil; each state, sanitary water supply with sanitary drinking appliances and at least two sanitary toilets; some required adequate cloak rooms properly heated and ventilated; one state, fly screens for all doors leading into school buildings and at least two windows to be used when needed; each state, a desk and one or two chairs for the teacher and adjustable seats or three sizes of desks for the pupils; 16 to 25 linear feet of slate blackboard fitted with sanitary chalk trough, in most instances; some requirement by each state; two states, a good library, that is a bookcase for each room with newspapers and magazines kept in places properly labeled and library rules followed; the others, a bookcase with at least $10.00 worth of books, a dictionary, and an encyclopedia or similar equipment; maps in cases, one to eight, some requirement by each state; three states, globes, weights and measures, textbooks for teacher and pupils, supplementary readers for lower grades, household arts equipment for hot lunches, manual training and agricultural equipment, and musical instruments; some others make a part of these requirements and some did not designate any. Requirements for primary supplies were in some instances $5.00 worth of material for constructive work; some, four types of primary material; others, adequate material for primary work while in others no requirements were designated. First aid outfits were required in two states. Requirements for decorations varied from one to four framed pictures with interior of rooms tastefully decorated; some requirement by each state; for grounds, one-half an acre, one acre per teacher, two acres, ample grounds for supervised play and school garden, and ample playground were the requirements most generally designated. A few states require at least four pieces of play apparatus, some apparatus sufficient for intelligent play, while others made no requirements. Some states required shades, shrubbery and walks to buildings; others, only shades and in some instances no requirements were designated. Each state designates a building for fuel. Two sanitary toilets properly located are required in every instance where toilets were not indoors.

In all instances it should be remembered that the above outline does not include all the requirements designated for each state, but it gives a fair representation of the wide range and variations in the different state requirements.

The English Teachers Council at its Greensboro meeting in March appointed a committee to investigate conditions governing the teaching of English in the schools of North Carolina. Among the questions to be considered and investigated by this committee are: The burdens placed on each teacher by way of responsibility for "extra-class" activities, the number of students taught during the day, the average size of classes, etc. The investigation is to be made not for the purpose of securing "shorter hours" or "more pay" but with the sincere desire of getting the facts in order that a frank estimate may be arrived at which will make it possible for a teacher to do more composition work, better English teaching, and increase her usefulness as a real teacher.

ON HIGH SCHOOL SCIENCE EQUIPMENT

By W. B. RICHARDSON
Wilson, North Carolina, High School

THE PURPOSE of this article is to offer a few suggestions about the equipment of high school science laboratories and classrooms.

A high school leaflet entitled, *Apparatus and Equipment Required for the Teaching of Science in the High Schools of North Carolina,* has been prepared by Professor J. Henry Highsmith, State Inspector of High Schools for North Carolina. It can be secured free by writing to Professor Highsmith at Raleigh, N. C. This leaflet gives, besides a few general suggestions, a special minimum list of high school laboratory apparatus, with the approximate cost of the same for the teaching of any state adopted high school text-book on (1) general science, (2) biology, (3) physics, and (4) chemistry. Some localities of the state, due to their agricultural, manufacturing, or other peculiar industrial interests need these courses (particularly the botany side of biology, and the fertilizer, tanning, vegetable oils, etc., sides of chemistry), modified to meet their own needs. For such places a more elaborate list of apparatus should be obtained for the school. Since, as a result of these particular local needs, there is quite a bit more specific apparatus that is desirable, not given at all by Professor Highsmith and only a part of which could be given here, we suggest that each high school science department first consult Professor Highsmith's list and then on the basis of these special agricultural, manufacturing and other local interests and needs work out for itself how much and what kind this additional apparatus must be. This article must confine itself to more general suggestions, covering the recitation rooms as well as the laboratories.

Considering the size and expected attendance of pupils in the average North Carolina high school building now being constructed and the approximately fifty per cent of these pupils who take science, we are limited in the amount of building space for each pupil and each branch of science. There should be in any school that makes any pretense at all to teach science at least two laboratories and two recitation rooms for science; ideally, a laboratory for one of the main science courses—physics, chemistry, biology, and general science. In case only the minimum space allowance is available, the subjects of physics and biology might use one of the laboratories together since for both of these subjects the pupils need comfortable tables and stools or chairs of about the same type in order to perform the experiments. The other laboratory could, then, be used for chemistry and general science.

The recitation rooms should have a demonstration table at which the science teacher performs experiments in the presence of the class. Light, blackboards, arrangements of seats, etc., might well be similar to the other recitation rooms or the movable type of desk chair used. However, an ideal recitation room should have the seats and desks raised and the windows provided with shades so arranged that the room can be darkened for lantern slides whenever desired. The demonstration table, box shaped, should be built in of substantial wood with drawers and closet for apparatus, lock, hood for fumes, sink and faucets of hot and cold water, gas jets, and electrical connections. The same list of special apparatus, like burners, test tubes, etc., as provided for each student in his desk according to Professor Highsmith's list should be included for the teacher's demonstration table. A case for holding the more common reagents is desirable. Additional apparatus or reagents or samples might be brought from the stock room or cases when needed. In the recitation room for chemistry charts giving the atomic weights, the electromotive series, and the periodic arrangement of the elements, should be hung on the front wall above the blackboard.

For the laboratories the desks or tables, seats, etc., can be selected by studying catalogues of standard equipment companies, the quality unfortunately too often having to depend on the available funds of a given school. Better still, firms like the L. E. Knott Apparatus Co., Central Scientific Co., are glad to send a representative to a school to assist in making blueprints of laboratory layouts, and in giving various suggestions on the selection and arrangement of laboratory equipment.

Each student should have an approximate table space of 2½ feet to 3 feet long and 18 to 21 inches wide and be provided with a chair or stool. For chemistry, ideal desks should have soapstone or specially prepared acid-proof maple tops, soapstone trough lengthwise through the table or sink on one side of each pupil, shelves above center of table for reagents, gas and water jet, and hood for each student. There should be a sink at each end of the laboratory table and a waste jar on the floor below. There should be

shelves for glass stoppered bottles of the reagents, where the bottles are plainly marked with a large label, printed with printer's ink and covered with a thin coat of paraffin, a number on the bottle corresponding to a number just below it on the shelf. In case more than a liter of some very common reagents are needed it is advisable to have three or five liter bottles of the reagents made up and siphons connected.

If the school does not have a small storage room, a very desirable small room where the stock apparatus and reagents should be systematically arranged, there should be large cases in the laboratories fitted with locks to hold them. The same general suggestions hold good for the physics and biology laboratory with the exceptions that the tables need not be so elaborate, but with wooden tops 1½ inches thick, not necessarily solid to the floor, no hoods, fewer sinks, but with especially comfortable stools or chairs and with uprights of some kind in the center of the tables from which to suspend physical apparatus.

In ordering apparatus and chemicals the following suggestions may prove helpful. Always order as large a quantity of material as you may need for some time, and buy standard amounts of material like chemicals as listed in the catalogues, such as 100g. or 1 lb; otherwise the cost of weighing out odd quantities and preparing these for shipment may amount to more than the cost of the chemicals. Catalogues will be sent on application to dealers and should be in every school. A list of the supplies needed may be sent to a number of firms for quotations on prices. With large orders sometimes considerable saving may be made by placing the order four or five months early and requesting the dealer to import duty-free such articles as are made cheaper than by American manufacturers. Higher prices must be paid for small orders placed for immediate delivery.

The following are the names and addresses of five of the larger firms from which chemicals, chemical and physical apparatus, laboratory furniture, etc., can be obtained.

L. E. Knott Apparatus Co., Boston, Mass.

Central Scientific Co., 412 Orleans St., Chicago, Ill.

Eimer and Amend, 2057 Third Ave., New York City.

Bausch and Lomb Optical Co., Rochester, N. Y.

Leonard Peterson and Co., 1234-48 Fullerton Ave., Chicago, Ill.

It is not possible in this brief space to suggest even a list of science books for reference. Certainly, however, every science department ought to have the bulletin prepared by Professor Highsmith, and a copy of Mills, W. T., *American School Building Standards.*

SUPPLIES

By CURTIS CRISSMAN
Battleboro, N. C. High School

IT IS OFTEN convenient when ordering or planning to order the high-school supplies for the year to have a list of such supplies with which to check the amount on hand and thus to estimate the needed amount to requisition. The following article has been prepared with this idea in mind, namely, as a check-list, and with the further idea that it may be helpful as a suggestion about what working tools teachers in high school ought to have.

High school supplies may be distinguished from permanent equipment in that supplies are of a more perishable nature, or, perhaps we might say, supplies are not built in or supplied with the building. Some supplies have to be replaced regularly every year, others not quite so often but regularly, while still others have to be replaced at more or less irregular intervals.

These supplies may be divided into three classes, namely: (1) necessary, (2) desirable, (3) possible. Necessary supplies may be said to be those that are absolutely necessary for the running of the school. That is to say, without this class of supplies it would be impossible to operate the school. One might define desirable supplies as those that are highly essential to the successful operation of the school but are not absolutely indispensable. Possible supplies are those that would be of decided value and help to the school but are not absolutely necessary, or so highly essential as either of the other two classes.

In the necessary list of supplies, i. e., those without which no school can operate, we have placed the following articles:—chalk, blackboard erasers, one of which will be needed for every three lineal feet of blackboard space, pointers, which may either be bought or secured from a nearby woods—two for each room; waste baskets—one for each room; trash cans, a rubbish burner, dust pans—one for each floor; floor oil and oilers, brooms, sweeping compound, disinfectant, ladder, wheelbarrow, rake, shovel, hoe, hammer, screw-driver, saw, pencil sharpeners—one for each room;

ink, and at least one paper cutter. If the building is located in a community where there is much mud, it is necessary to have a combination foot scrape and brush at each outside door. It is also necessary to have a door mat at each outer door to serve as a protector for the floors. The janitor will constantly find uses for a hammer, screwdriver, saw, and ladder in keeping the building in repair, and the wheelbarrow and the tools that go with it are necessary to keep the grounds looking well. These tools for the janitor should be of good quality, well-kept, and a place under lock and key provided for their safe keeping.

In the list of desirable articles we have placed first the water coolers, drinking cups, and drinking cup dispensing machines. These will be necessary only when there is no water system in the building and drinking fountains are not installed. Let it be said here that if there are no bubbling or other sanitary water fountains, the individual cups are absolutely necessary. The flat drinking cups are less expensive than any other kind and will serve the purpose just as well as any. Blackboard eraser-cleaners are highly desirable. An eraser may be used a great deal longer if regularly cleaned. The vacuum eraser-cleaner is the best. Paper towels and towel cabinets are also of inestimable value to the school, in fact they are almost absolutely necessary for the successful operation of a school, if one would maintain sanitary conditions. Blackboard cleaners also fall in the list of desirable supplies. Of course blackboards may be cleaned with water and a rag but the commercial cleaners are much more desirable.

The remaining few articles that we have listed are really necessary but we have placed them as possibly belonging in the third class. Quite often the blackboards need some improvement if not of slate as they ought to be, and this can best be done by the use of slating. It is not a bad idea to keep a can of slating and a slating brush on hand. Windows can be cleaned with water and a rag and by having a boy to climb up on the window sill outside the window, but it is much more desirable to have a patented window cleaner. Where the school can afford it some extra ink wells should be kept on hand to replace those that are destroyed or lost from the desks. Each school should also keep a supply of window glass to replace broken panes. Each teacher should be furnished with a supply of paper clips and each child should be required to fasten papers together with these clips when the written work covers more than one page.

Each teacher will of course have his or her own list of supplies determined by the needs of the subject taught by that teacher. In science there is a very special set of supplies as well as of equipment needed. In mathematics there is need of blackboard compasses, long blackboard rulers, a section of quadrille-ruled board or slated paper ruled into cross-sections.

One final word: Supplies should be ordered early, *but not often*. It is best to make a very careful and detailed list of needed supplies at the close of a school year and get the order for the new supply in the hands of the business house *right then* to be delivered by them not later than two weeks before school opens and billed not earlier than the first of the month on which school begins. When the bill comes, pay it promptly and keep the credit of the school or district good. Don't let bills for supplies accumulate. Don't, above all else, order a few little things at a time several times through the year. Try to anticipate needs. Order according to the needs and then live within the amount ordered.

THE SCHOOL BUILDING RENAISSANCE

THE ACTIVITIES and investigations of the National Education Association in the field of school building have been well received throughout the country. Excepting a few localities, building costs are now lower than at any time during the past five years. The market for school bonds has also improved. As a result of these favorable conditions school authorities are undertaking new building projects and speeding up those already underway. In the aggregate the new seating capacity which will be available in September, 1922, is large. It will be far from adequate. It will fall far short of making up for the suspension of schoolhouse construction during the period of excessive costs.

The building of a school is a most important event in any community. The school spirit of the locality had a direct relation to the impressiveness and usefulness of the buildings which house its educational activities. This is as it should be for the school building is the very heart of the community. In it the children of the community spend a large share of their time. Their comfort and happiness and health—their spiritual and physical well-being—is the biggest asset the community can possibly have. It is well that the best modern school buildings are truly temples of learning, for they symbolize more than any other one structure the faith of democracy in its own future.—THE JOURNAL of the National Education Association, March, 1922.

SOME SUGGESTIONS FOR THE DEVELOPMENT OF THE PLAY MOVEMENT IN OUR HIGH SCHOOLS

By HAROLD D. MEYER
University of North Carolina

ONE OF THE GREATEST lessons of the world war was the fact, so clearly shown, of the physical unfitness of a large number of our men of fighting age. To correct this condition in the citizens of tomorrow great interest in physical education has been aroused. The advancement of physical education as a part of the school program is one of the outstanding features of our recent educational development. The proper stress of the physical is being given through the directed development of the play movement.

"There is no agency known to man, making so much for physical and mental development, for quickness of body and mind, for poise, self confidence, ability to correct mental and bodily action and above all for that vague thing called personality, as *play*."

Besides the mental and physical values we find that some of the very finest and highest lessons in real moral character growth may be found in play. In fact, the ethical factor in games is one of the play movement's greatest assets. Play also helps the individual to find a place in the group. It develops leadership and affords universal expression not found in other activities.

Then too, there are preventive values of play. To forestall sickness in mind, in morals, in body and in social graces play becomes the great preventive force necessary to the leader and the teacher of boys and girls everywhere. Instead of spending millions of dollars to take care of the delinquent, dependent, and defectives, why not spend something of money and eager interest in the work of the playground and the play community?

Every community, no matter how large or small, may have play areas and to a certain degree organized play. And they may have it functioning properly. The future citizenry demands it. The welfare of the future trend of democracy, so truly wrought out in play, demands it. The whole army of future citizens longs for it and therefore it becomes an opportunity and an obligation of the citizen today to provide it.

Probably the one place where the greatest call comes for proper physical growth and development of the play movement is in our high schools. With all the changes of educational advancement, with the ever present and vital changes of physical and moral standards, the high school boys and girls need every care and attention that may possibly be given for the full, free and steady expression of the play instincts.

We are then confronted with the question: What is the minimum standard of equipment needed to insure the proper development? Most people think of the playground in terms of expensive equipment. It is possible to make the playground movement in any community a fairly costly one. But it is neither necessary nor desirable. What is chiefly needed is not expensive apparatus but a few people interested in the movement and willing to give some time and energy to directing and supervising play and games, plus a few pieces of useful and inexpensive play apparatus. There are a number of splendid, useful, and safe pieces of equipment that may be home-made. There is in every community enough material, not in use, that may be utilized in the making of this equipment. The teachers and students with the coöperation of patrons can make the equipment and have a playground that will be a credit to the school and the community and be of the highest value to the pupil.

In our cities and larger communities where the high school has quarters independent of the graded school the play area is developed entirely on the basis of high school students. When the high school and graded school are one, due attention should be given to the play development of the pupils in the grades, especially is this true in regard to games that require no equipment. As this paper is dealing with the high school, we shall only equip that part of the play area, but we must keep in mind the fact that the other students require space and must be considered.

1. To have one person as supervisor of play in the high school is essential. If this person can not give full time, he or she should give a large portion of time to the playground work. The movement should have some type of organization and some degree of control.

2. To have the teachers, all of them, interested and active is a great step forward and a step of inspiration. All can help and all may be benefitted thereby.

3. A play area for games. This area should be free from all equipment and far enough removed from the danger of balls and other elements of equipment. Here tag games, relay races, mental games and the like may be played by various groups.

4. Where the space will permit, have a baseball field.

Perhaps, neglect some other pieces of equipment for this great American game. It seems essential to the real growth of boyhood. Where the space will permit, have an indoor baseball court for the girls out of doors. Let them play with an indoor ball and bat.

5. A basketball court is an essential piece of equipment in season. It is a splendid game for high school students. Where the boys and girls have separate play areas provide a court of each group.

6. Volleyball is one of the finest games known. It is new to most high school groups but when once learned it proves most popular. If possible, provide two courts, one for the boys and one for the girls.

7. The area for the boys should have a number of horizontal bars scattered about. These pieces of equipment give much freedom to the individual for proper exercise.

8. Provide a number of swings for the girls. Be sure that they understand how to use them and use them properly. They have splendid possibilities for good.

9. A jumping track and pit is a fine piece of equipment both for boys and girls. Here running high and broad, standing high and broad jumping is performed. Great interest may be obtained in jumping. Keep records of all jumps and use them in advancement from month to month.

10. Have two or more quoits sets. A place given to quoits will be found to be a good investment. All students enjoy throwing horse-shoes and with a good quoit set much interest will be added.

11. The baseball field may be used for football in season.

12. Other pieces that may be added from time to time are: teeter boards, giant strides, slides, croquet sets and where a large area is available—tennis courts. Do not take up a limited space with tennis courts. Remember that while tennis is a most excellent game, only four may play at one time and in a high school numbers must be considered. Let the tennis courts be placed about in the community.

All the material that has been listed is not costly. The greatest expense is in the purchase of balls and nets. The entire equipment may be obtained at a minimum cost and through proper interest the money may be easily obtained.

Funds for the equpiment may be obtained in numbers of ways. The school board should furnish the standard equipment just as they furnish desks, chairs, tables and the like. By plays, socials, box suppers and many other attractive ways funds may be raised to supplement what the school board gives or to obtain added and better equipment or more equipment.

Use thought and care in placing equipment. Avoid placing ball-games in dangerous positions. Utilize the space to best advantage. Do not forget the position of the sun.

Place benches about for the use of players in rest periods. These benches may be home made and with a little paint may be made attractive and help the general appearance of the play area.

Endeavor to have every student playing. The games that permit large numbers to take part are best.

Attempt some kind of daily calisthenics. Do not make it too strenuous but rather have it light and graceful in movement. Give exercises especially designed to develop coördination of the group.

Do not attempt to organize competitive teams in baseball, basketball and other games of that type where there is no one to properly coach and train the teams. There is no good to be obtained should the attempt be poorly made.

From time to time have athletic tests, field days, recreation hours, and exhibition drills. They add interest, not only to the play movement but to the general school spirit.

Have a medicine chest as a part of the playground equipment. Let it contain such things as iodine, witch-hazel, bandages, absorbent cotton, and other medicine for first aid. Study first aid.

Develop a true sportsmanship spirit. Teach players how to accept victory and defeat. Stress fairness in play, physical development, moral tone and best of all—a highly developed personality in full harmony with fellow players.

WHAT STUDIES ARE PRACTICAL?

And there is where we stand today. The elimination of Greek from the college curriculum blurred the high light, the supreme distinction of scholarship. The elimination of Latin as an essential study leaves us without any educational standard save a correct knowledge of English, a partial knowledge of modern languages, and some acquaintance, never clearly defined, with precise academic studies. The scientist discards many of these studies as not being germane to his subject. The professional student deals with them as charily as possible. The future financier fears to embarass his mind with things he does not need to know.—AGNES REPPLIER in *Atlantic Monthly* for April, 1922.

HIGH SCHOOL CLASSIFICATION

By J. HENRY HIGHSMITH
State High School Inspector

CONSIDERABLE PROGRESS has been made in standardizing the high schools of the state. The value of standardization is pretty generally recognized. In attempting to standardize high schools the aim has been to increase the efficiency of the schools and at no time has there been an attempt to put the schools beyond the reach of the people. The purpose of standardization is to indicate what a real high school is and to encourage school officials to measure up to this standard for the sake of the boys and girls involved. Standardization is simply a means of measuring a school and its work. There are certain factors that enter into good high school organization. There are certain elements that are absolutely essential if good work is done in any school of high school grade. Standardization serves as a measure of what should be attempted and what should be achieved.

I. Standard or Accredited High Schools.

School men in the state have become quite familiar with what is known as the standard or accredited high school. By a standard or *accredited high school* of the lowest class is meant the following:

1. A four-year course of study beyond the seventh grade.
2. A term of eight months or 160 days, exclusive of holidays.
3. Three whole-time high school teachers holding proper certificates.
4. Recitation periods at least forty-five minutes in length in order that each course may be the equivalent of 120 clock hours, or one unit of work.
5. Laboratory facilities for the teaching of science, especially general science and biology.
6. A library of not fewer than 300 volumes (See bulletin 33, *High School Library.*)
7. At least forty-five pupils in average daily attendance.
8. Fifteen standard units required for graduation.

The time has come for standardization of high schools to include the schools that cannot meet the requirements for accredited rating. From the foregoing statement of what constitutes a standard or accredited school it will be seen that there should be three teachers if four years of work are given.

II. Certified High Schools.

Below the standard or accredited school two other classes should be provided for. They may be called certified and recognized high schools. By a certified school is meant one that meets the following requirements:

1. Three years of work beyond the seventh grade. That is the eighth, ninth, and tenth grades, or first, second and third years of high school.
2. A term of thirty-two weeks or 160 days, exclusive of holidays.
3. Two whole-time teachers holding proper certificates.
4. Recitation periods at least forty-five minutes in length.
5. Twelve units required for completion of the course.
6. Laboratory facilities for the teaching of general science at least.
7. A library of not fewer than 200 volumes (See bulletin 33, *High School Library*)
8. At least thirty pupils in average daily attendance.

It will be noted that the length of term and the length of recitation periods are identical with requirements for a standard school. This is done that a student may get full credit for work completed when going from a certified to a standard school. In other words, a person who has completed the work in a certified school can graduate from a standard high school in one year and receive all the benefits of graduation from a standard school.

III. Recognized High Schools.

By a recognized high school is meant one that meets the following requirements:

1. A two-year course of study. That is, the work of the eighth and ninth grades, or the first and second years of high school.
2. A term of eight months or 160 days, exclusive of holidays.
3. One whole-time teacher.
4. Length of recitation periods forty-five minutes at least.
5. Eight units required for completion of the course.
6. Library of not fewer than 100 volumes (See bulletin 33, *High School Library.*)
7. At least twenty pupils in average daily attendance.

Since the length of term and the length of recitation periods are identical in this case as in the case of certified or standard schools a pupil may go from a recognized school to a certified or standard school and receive credit for the completion of two years of work.

In other words, a person going from a recognized school to a certified school can complete the work in one year, or in his going from a recognized to a standard high school, the work may be completed in two years, and all the benefits of graduation from a standard school may thereby be received. The organization of high schools on a basis of *standard, certified,* and *recognized* schools will undoubtedly lead to clearness and definiteness and be conducive to more effective work whenever high school work is undertaken.

In some cases one teacher has undertaken to do four years of high school work. This is a manifest impossibility. No teacher should attempt to do more than two years of high school work. As already indicated two teachers, except in rare instances, should attempt not more than three years of work. Three years of work cannot be done satisfactorily by two teachers, unless a scheme of alternation of subjects is agreed upon and strictly adhered to.

It is possible for three teachers with proper classification of students to give fairly adequately four years of work.

In organizing schools according to the suggestions for *recognized, certified* and *standard* schools, it will be impossible to cover as many subjects as has been done formerly in many cases, but undoubtedly the quality of work will be greatly superior to much of the work done heretofore. Our effort should be to secure the highest order of work possible wherever any amount of high school work is undertaken.

"ON BAGS OF GOLD"*

By LAURA BELL EVERETT
Berkeley, California

DID MR. Gradgrind in demanding "facts, sir, nothing but facts" lay the teaching profession under a spell from which it has never fully recovered? When schools and schoolteachers appear in fiction it is too often in caricature. If they appear in romance it is in order that they may furnish the unromantic background for the purpose of contrast.

It is, then, with something of surprise that one reads on in Ernest Poole's *Beggars' Gold* to find that Peter Wells, the hero, does not desert teaching for a more romantic calling, but remains to work out in his Americanization classes the truth of the parable from which the story takes its name: "we are beggars sitting on bags of gold." Peter, who "had known so many men who had failed often finer and more humanly appealing than those few who had won success," exclaims,

"How much we all have in ourselves, both good and bad, and how it's kept down. I wonder what the world would be like if every mother's son of us became what he might have been."

The background is a city school and the story does not leave the noisy school where Italians and Sicilians, Greeks and Armenians, Poles and Jews speak "terrific English." There Peter finds the heroine who is a woman so true to life that she does not fall in love with some one beside her husband, as heroines are now frequently forced to do by the exigencies of the novel that hopes some day to be a movie. There he finds, too, little Moon Chao, the Oriental sunbeam that lends some of the glamor of Cathay to the story. Moon Chao will delight both those who like the Chinese and those who do not know them.

The interviews Peter has with Roosevelt, and his writing of the great American's life form an episode of especial interest, though many would like a different ending.

The words with which a letter from Roosevelt closes: "I take off my hat to teachers. You have the greatest job in the land. At best I can only lead men. You can mold them," are not over emphasized. Were that the case one might feel that the book is only a pair of rose-colored spectacles. On the contrary it portrays the grind, the discouragements, the disadvantages, and while seeing these as they are, makes the teacher who has spent his whole life in the work, say, "see if you can't get a little pleasure out of this vale of tears . . .try to get over the idea that the whole job is drudgery," and "my own little dream of bumping the stars is dead but in others it lives on! The king is dead. Long live the king! And as I watch this feeling rise in thousands of young people, I'm always finding something new. I've got over the idea that I can do much to mold their lives. Instead of that I watch 'em all—just giving a hand to them now and then."

The book does not lend itself readily to quotation. It is really an organism and should be known as a whole, as a faithful picture of the life of the teacher who knows that the best things of life are the intangible ones. "We are beggars sitting on bags of gold."

**Beggars' Gold* by Ernest Poole, author of *The Harbor* and *His Family*. The Macmillan Company, New York.

THE HIGH SCHOOL JOURNAL

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EDITORIAL COMMENT

Durham Wins Aycock Cup

By winning the Aycock Memorial Cup for two years in succession the Durham High School has earned a coveted honor among North Carolina High Schools and it has established a reputation in the field of debate that will remain one of its cherished traditions. Durham has been the winner over all comers in three of the ten annual contests held under the auspices of the Debating Union, but the cup has become its permanent possession by virtue of Durham's second successive annual victory. Here's congratulations to the Durham High School—its students, teachers, debaters, and their trainers. You have won a signal victory over worthy opponents, and the prize that is yours has been worthily awarded.

Two Important Cases

There are pending before the Supreme Court of North Carolina two cases that have direct bearing of the greatest importance on the State's educational program. The one is to determine the validity of the act authorizing the State to issue $5,000,000 of bonds for school buildings; the other relates to the voting of special taxes for school purposes in consolidated districts.

Should the bond act be declared unconstitutional, most of the counties will find themselves in a most embarassing financial condition. In the hope and expectation of getting State aid from this source, many counties have projected their building programs, have let contracts for new buildings, negotiated short-term loans through local banks, and procceded with their work. To say they will be financially embarassed is indeed to state the case mildly.

Should the second case be decided adversely, the consolidation program may receive a temporary set-back, though the result will not be so disastrous as would be an adverse decision on the bond act. An adverse decision, however, will not affect the authority of the county boards to consolidate districts, but it will affect the voting of local taxes on consolidated districts.

Early decisions are expected in both cases. Further comment will be made on these cases in our May issue.

The N E A

The next meeting of the National Education Association will be held in Boston in July, and it will be an important meeting. Are you a member of the Association? Why not enroll now and make your plans to go to Boston in July?

Summer School

Again the time is at hand when wide-awake and progressive teachers are laying their plans for summer study and wide-awake and progressive summer schools are making their plans to accommodate the thousands of teachers that will seek admission. At this time all indications point to crowded conditions at all the larger summer schools of the country. A word to the wise should be sufficient. Select the summer school that offers you the best advantages and arrange early for your accommodations.

THE HERFORD AESOP

A Child was found one pleasant day
Reading a book of Verses gay.
Of him, an Adult, chancing by
Demanded what he read, and why
He was not with his friends at play.
The Child replied he'd rather stay
And read his Aesop story book.
The Adult said, "Come, let me look!"
And then exclaimed, "Why this is done
By Mr. Herford! Well what fun!"
He took the book, turned with delight
To drawings gay and verses bright.
An hour passed, the Child now wept,
"I want my book that you have kept."
Alas, the Adult heard him not,
The waiting Child he quite forgot,
But not the book. He passed from view
And took the Herford Aesop too.
The moral, friends, is plain as pease,
This Herford book is sure to please
Both young and old—and I surmise
That Mr. Aesop's pleased likewise.—E. D. S.

THE LATIN COLUMN

TWO YEAR SCHOOLS

SCHOOLS that can at present offer only two years of Latin will hardly be wise in restricting their work to the beginner's book plus Caesar's Gallic War. A better scheme would select some book of readings dealing with various matters of Roman life and history in place of the Caesar, and, for the first year, a book giving stories to translate rather than separate sentences throughout, and giving work in English derivatives and other language relations. Illustrative material will properly be worked in, such as that given by the picture-book described in this column.

WHAT ARE GREEK AND LATIN GOOD FOR

This is the frank question asked and answered by Professor George Ragland in the Kentucky High School Quarterly for January, 1922. His paper is short, meaty, and readable, and therefore worth the attention of any Latin teacher. It is published by the department of education, University of Kentucky, Lexington, Ky.

A ROMAN PICTURE-BOOK

"The Roman civilization" is the title of a useful book edited by A. F. Giles. It is a little book of only 160 pages, and of some eight short chapters, telling in brief and clear form about the Roman state, Roman religion, law, Roman cities, commerce and industry, social and family life and education, buildings and works of art, and the army. But its best feature is a large number of very excellent photographic prints illustrating the topics presented. The book ought to prove stimulating in any class of High School Latin.

FOR LAW STUDENTS

High school students who are thinking about taking up law as their profession should by all means be advised to get all the Latin courses they can in school. In the University Latin is now required of those taking the combined A.B. LL.B. course, and similar requirements are made in other colleges. Aside from requirements, knowledge of Latin is useful to a law student. Modern law uses many terms taken over from the Latin. Modern books on law often quote the old Latin law-books without translation. One of the leading standard text-books on modern jurisprudence, written by T. E. Holland, can hardly be understood by a man who knows no Latin.

A LITTLE SUGGESTION

"The New Universities Dictionary," which the Greensboro News has recently been distributing through the State, includes some features which a Latin teacher might make use of with interest and profit. A list of foreign words and phrases gives a number of Latin proverbs and sayings. Another list of the most common abbreviations can also be related to the Latin work. For example, the expressions e. g., etc., Q. E. D., i. e. and others often used are given in full and explained.

HORACE'S IDEA OF A COUNTRY

"Hoc erat in votis: modus agri non ita magnus,
hortus ubi et tecto vicinus iugis aquae fons
et paulum silvae super his foret. Auctius atque.
di melius fecere. Bene est."

This may be read: "This was my prayer: a bit of ground not so large, a garden where, too, near the house should be a never-failing spring, and above these a little strip of woodland. The gods have done more generously and better for me. It is well."—G. A. H.

ENGLISH TEACHERS ATTENTION!

WITH THE FIRST ISSUE of the High School Journal next autumn, Miss Eleanor Stratton, vice-president of the North Carolina Council of teachers of English, will edit an "English Teachers' Page" for this publication.

Miss Stratton undertakes this duty at the request of the editors of the *High School Journal* and the English Council. That the page may be as useful as possible to teachers in the state, Miss Stratton urges that those interested in English work will write her freely of their views, will submit brief material at every opportunity, and, generally, hold themselves responsible, with her, for the success of the page. The page is to be open to all so far as space will permit.

Members of the English Council are urged to make use of the page as an open forum for their ideas. Write Miss Eleanor Stratton at Asheville High School now while the experiences of the year are fresh in mind. Suggest topics for discussion, pass on any new ideas as to teaching literature or composition, and throw out questions which you should like to have solved.

C. A. HIBBARD,
President, State Council of Teachers of English.

SALEM ACADEMY AND COLLEGE

By PRESIDENT HOWARD E. RONDTHALER
Winston-Salem, North Carolina

THESE TWO INSTITUTIONS are the outgrowth of Salem Female Academy, founded in 1772 and thus one of the pioneer institutions for the higher education of young women in the Southland.

The two institutions are strictly distinct in housing, in faculty, in discipline, and in all interior arrangements.

Salem College offers to high school graduates the usual four year courses leading to the Degree of A.B. or B.S. In addition a four year Diploma course in music is offered to high school graduates but no one is received into this course who has not also completed the required work in music leading to freshman entrance.

It is proper to remember the century old musical traditions upon which this community is founded and which to this day pervade and distinguish its civic and scholastic life.

The college plant represents a total investment of $425,000, and the endowment is $350,000. In addition pledges are on hand but not yet due, which will increase buildings and endowment to $950,000.

The essential ideal of this institution is, as it has been for one hundred and fifty years, namely, the development of character. This is the service which "Salem" has sought to render to successive generations, and this is the real reason for "Salem's" existence and so far as this service has been efficiently rendered, for "Salem's" loyal hold upon multitudes of alumnae.

The life of this institution is simple, earnest, and sincere; the scholastic and social ideals are clear, honest, and correct. The "Salem" training finds its highest vindication in multitudes of homes in which these ideals have become lifetime realities.

ENTRANCE MAIN HALL SALEM COLLEGE
Showing Memorial Door Class 1913, Steps Class 1915, Lanterns Class 1911

SAINT GENEVIEVE-OF-THE-PINES

By HELEN D. DUNNIGAN
Asheville, N. C.

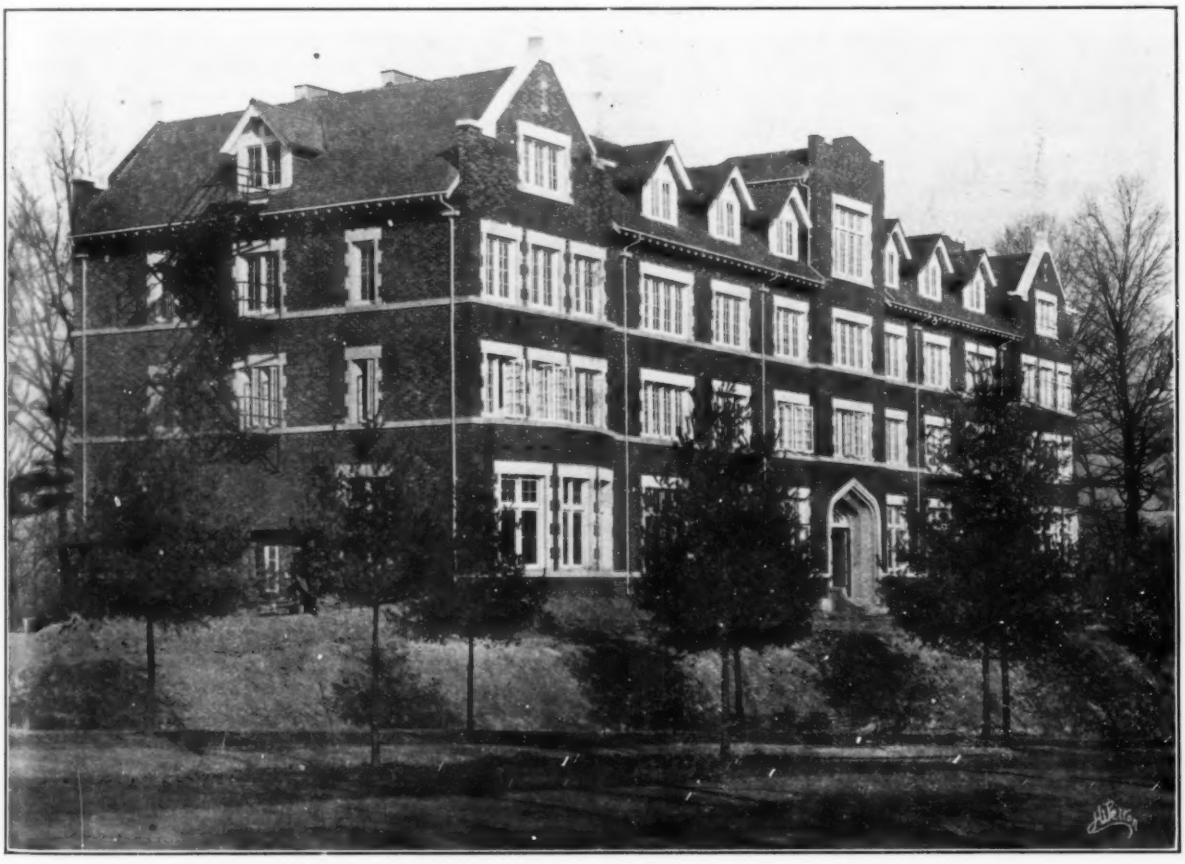
THE founder of the order of Christian Education was born on Nov. 29, 1772, at Montrereil in the famous province of Normandy, France. Jere Lafosse's ideal embraced the highest principles of Christianity; mainly the highest grade of teaching based upon moral training. That his ideal which was inspired by God succeeded may be seen in houses multiplied in many different parts of France; and in the later foundations which were made in England, Belgium and in the United States.

It was evident that God's will was to be heard and obeyed by the Sisters of Christian Education in a more literal manner than the founder ever contemplated. Certain friends represented to Rev. Mother Duval, the splendid field which the United States offered.

The winter of 1907 found the Religions of Christian Education in Asheville, North Carolina. The sixth of January 1908 saw the opening of the first school, Hillside convent; 1909 that of the college; 1915 that of the French Lycee. Today, 1922, preparatory, academy, college and French Lycee, each form a distinct department in the corporation best known as St. Genevieve-of-the-Pines.

The year 1922, due to the efficient work of Reverend Mother Lorin, finds St. Genevieve's College reigning in one of the most attractive and best equipped collegiate buildings in the United States. The artistic touch portrayed from the exterior view of the building is carried out in the most minute detail of the interior; the result being not only a comfortable home of learning but, "a thing of beauty and delight!"

The French Lycee of St. Genevieve's collegiate department is the only one in America. Native professors



are in charge of the classes, therefore there is no need of installed phonographs for the correct accent.

St. Genevieve's College has possessed the right of conferring degrees since 1915; said right granted by the State of North Carolina. To insure thoroughness in her work St. Genevieve's has an original system of examination, namely, the final examinations are not given by the professor in charge but by a professor of a different department; for example, the Professor of philosophy gives the economics—vice versa. This is to avoid any danger of coaching and mechanical memorization.

St. Genevieve's includes as many protestants as catholics in her enrollment, sometimes, the majority being protestants. There is only one rigid law enforced upon Sunday, namely, that everyone attend her own church. The teaching staff also includes both catholics and protestants.

St. Genevieve's graduates are holding professorships in various colleges throughout north and south; her credits are accepted by Columbia University, North Carolina, South Carolina, Wisconsin, Ohio, Arizona, Sophie Newcomb, Indiana and Notre Dame. Her motto is "quality, not quantity!"

CATAWBA COLLEGE

By PRESIDENT A. D. WOLFINGER, D.D.
Newton, North Carolina

CATAWBA COLLEGE is located in the prosperous town of Newton, county seat of Catawba County. Ideal in location as to health and general environment. Founded in 1851 she was granted the Charter in 1852. The college grew out of the need for a school of higher education in which young men might prepare for the ministry. As such it was founded by the Reformed Church in the U. S.

Professor H. H. Smith, father of Senator Hoke Smith, was one of its first instructors. Major S. M. Finger was one of the promoters. The venerable Dr. J. C. Clapp was its president for forty years. The institution was conducted as a High School until 1885. Her founders and successors were pioneers and leaders in Higher Education. Her service in those years was inspirational and constructive to the later High School movement.

In 1881 the school became co-educational and in 1885 began under the college charter of conferring degrees.

The college has maintained a four year classical and scientific college course, based on a four year high school course with admission on fifteen units. The major part of the graduates enter the ministry or the teaching profession. Our emphasis is on thoroughness by a Faculty with adequate equipment for the work. We aim to eliminate waste, extravagance and unnecessary expense to the student. While it may be true that education is expensive, we believe it should be possible to offer opportunities for a cultural college education within reasonable expenditure.

The spirit of the college is thoroughly christian and holds to the ideal of service as the goal of all education.

A four year High School under the title of Catawba Academy is maintained, students entering the University or any college. Through this is rendered a fine service to many who come from sections where they have no High School opportunities. As the consolidated system covers the State this agency will be dispensed with and all effort directed to the college work.

Under the present movement which terminates in 1925 the college will come into possession of funds for endowment purposes by means of which larger funds will be available for current expenditures and material equipment will be added.

Catawba College has always been a small college and regardless of its equipment will always likely remain on that list. In this she has been in company with those who have given to the world of service some of the strongest men. Technically she may have her shortcomings and has to keep in line with those who are restrained from noisy announcements, but in thoroughness of training, development of character and settling of life purpose she will continue to be well up on the list.

The North Carolina High School Text-Book Committee is now at work on the revision of the list of approved books in the subjects of History (including other social studies) and Natural Science. The committee's report will be made in May, and will be issued by the State Department of Education. The committee will not drop from the list any books now approved, since the State Board two years ago signed contracts for four years, but it can add to the present list now additional books for another two-year period. The new books that the committee may add can be used only in those counties that made adoptions in these two subjects for a two-year period. The new addition to the list will be published in our May issue.

MEETING OF THE NORTH CAROLINA ASSOCIATION OF TEACHERS OF MATHEMATICS

THE NORTH CAROLINA ASSOCIATION of teachers of mathematics held its meeting this year in Greenville at the East Carolina Teachers College. The meeting was not very well attended but proved to be one of the most profitable ever held by the association. Mr. Raleigh Schorling, of the Lincoln School of Teachers college, New York, was the chief speaker. His discussions of the work of the experimental schools in determining what should be taught in the seventh, eighth, and ninth grades were very interesting and tangible, the latter quality usually being conspicuous by its absence in such meetings.

The most interesting point in Mr. Schorling's material, to the writer at least, was the assurance that it is possible to determine by very exact methods the value of certain subjects taught in the schools. For example, it is possible to find out if the multiplication tables should be given as formal tables to be memorized, and it is found that it is better not to give them in that way. It is also possible to determine which text-books give the best results. Much that has found its way into our books, due in many cases to the hobbies of the writer, is found by test to have little value for anything definite enough to put into words. The defence will usually take refuge in the vague limbo of mental dicipline which can justify any course of study. Of course we all take advantage of the argument that the students will need the topic we happen to be talking about for higher work, yet it is exactly that argument that fails to gain substantiation from the tests. The person who is skeptical of the value of this experimental work in education would say at once that he would have to know something about the nature of these tests before being convinced of their value and that is the right attitude to take. After studying some of the mathematical tests however the writer is convinced of their fairness and of their ability to pick out the weak and strong spots in a student's training. We cannot go further into this question here but will be glad to furnish information to any who are interested in it. The best possible thing for a teacher who desires to keep up with the movement for the better teaching of mathematics is to send his name and address to the secretary of the North Carolina association of teachers of mathematics, Miss Juanita Puett, Laurinburg, N. C. along with two dollars to pay for membership in the association and the subscription price of *the Mathematics Teacher* which is the official organ of the national council of teachers of mathematics with which our association is affiliated. *The Mathematics Teacher* is the only journal published in this country which is of any use to teachers of high school mathematics outside of some of the publications of those universities which are making a special study of elementary mathematics. The writer has been asked by the national council to represent it in North Carolina and will be glad to answer any inquiries in regard to it and to send application blanks to any desiring membership.

The members of the association who were present at the meeting feel themselves indebted to the East Carolina Teachers College for the genuine hospitality of their entertainment and for the successful carrying out of a program of such high informational value.

As has already been mentioned it was decided that we should affiliate with the national council of teachers of mathematics so that the work of the association may be carried on throughout the year instead of being confined to one meeting a year. Any person paying the two dollar fee to the secretary of the local association will thereby become a member of the national council and receive the journal for one year from date. Practically every person attending the meeting joined at that time and it is hoped that all teachers of mathematics in the state will join also.

The officers elected for the coming year are as follows: president, Miss Fannie Starr Mitchell, Gastonia, N. C.; vice president, Miss Pencie Warren, Edenton, N. C.; secretary, Miss Juanita Puett, Laurinburg, N. C.; treasurer, Mr. M. H. Randolph, Bunn, N. C.—A. W. H.

MEETING OF THE NORTH CAROLINA COUNCIL OF ENGLISH TEACHERS

THE NORTH CAROLINA COUNCIL of English teachers held its fourth annual conference at the North Carolina College for Women on March 17 and 18, with a representative attendance of high school and college teachers of English. The conference opened on Friday evening, March 18, with an address by Professor Charles Swain Thomas, of Boston, and many topics pertaining to the teaching of English were discussed at the morning and afternoon sessions on Saturday, March 18. One of the most interesting phases of the conference was the presentation of the report of the committee on minimum requirements, by the chairman, Professor C. A. Hibbard, of the University of North Carolina. This report was published in the January number of the HIGH SCHOOL JOURNAL and was adopted by the council with a few slight modifications. The council hopes

to be able to put this report into the hands of English teachers in all the schools of the state.

Professor Thomas discussed "Literary appeals that we and our students can cultivate." He thought the teacher of literature should teach the art of reading. The ability to read intelligently is the first necessity in all aproaches to literature. Furthermore, literature should arouse the emotions, or it fails in one of its main purposes. As a final consideration, the teacher should strive to stimulate the will through contact with the great ideas of literature. Professor Thomas also conducted a round table discussion at the Saturday morning session, and in general stimulated interest in the vital problems of English teaching.

Miss Eleanor Stratton, of the Asheville High School, read a paper on "the special problems of English composition"[1] that aroused considerable interest. Miss Stratton showed how she had made use of the "project" method in teaching high school composition, and exhibited several specimens of work done in the Asheville high school in essay writing, newspaper and magazine making and other fields. This exhibit was examined by the teachers in attendance with much interest. Miss Stratton believed that there were three main problems in the teaching of English composition: the problem of making theme work interesting to the pupil; the problem of teaching the higher principles of writing without a sufficient foundation; and the problem of the English teacher to find sufficient time to do the necessary amount of work in theme correcting and supervision. She thought each theme should be made a worth while project rather than a dreaded task. Publicity for written work should be secured in any practicable manner, and students should be able to compare values. They should feel that they are writing for an interested public. Freshness and attractiveness of subject matter was necessary, and the teacher needed to get away from the idea that only literary topics were suitable for themes. The foundation work in the grades must be made more sure, Miss Stratton thought, or else the high school teacher must constantly be concerned with the mere mechanics of writing. The English teacher was now very much overworked and could not give the necessary time to proper revision of themes. There was also need of smaller classes and more individual instruction.

Professor Edwin F. Shewmake, of Davidson College, discussed "writing through reading."[2] He believed that writing could be taught effectively through reading; not necessarily the reading of classical literature but of the newspapers and magazines as well. Longer articles should often be used so as to give a sense of structure and paragraph development. Reading would help to enlarge the student's fund of ideas, and furnish models of effective writing. The student must acquire a knowledge of how ideas are built up and sentences are put together.

Professor A. C. Hall, of the North Carolina College for women, made a report on the last meeting of the national council of English teachers, which he attended as a delegate from the North Carolina council. He declared that the problems of the state council were the problems of the national council, and felt that the two organizations might work together with profit. Mr. Hall stressed the need of correlation in high school and college English teaching, and believed that minimum requirements would help in the attainment of proper correlation.

At the closing session Miss Laura Tillett, of the Raleigh High School, reported on the work of her committee in getting together a useful library for circulation among the English teachers of the state. This library includes valuable pamphlets, bulletins, and official publications dealing with the various phases of English teaching. More than 50 documents have already been collected.

During the coming year the council expects to make a special study of the conditions of English teaching in the schools of the state. The president will appoint a committee to carry out this investigation. The place of meeting for next year will be decided at a later date.

The following officers of the council were elected for the coming year: Prof. C. A. Hibbard, president; Miss Eleanor Stratton, vice-president; Miss Meta Eppler, Durham, secretary and treasurer; Prof. R. H. Thornton, North Carolina College for women, reportorial secretary. The members at large of the executive committee are Miss Ida Millis, Jamestown, Mr. J. F. Casen, Raleigh, and Miss Rennie Peele, Goldsboro.—C. A. H.

[1] Miss Stratton's paper will appear in a later issue of THE HIGH SCHOOL JOURNAL.

[2] Professor Shewmake's paper will appear in a later issue of THE HIGH SCHOOL JOURNAL.

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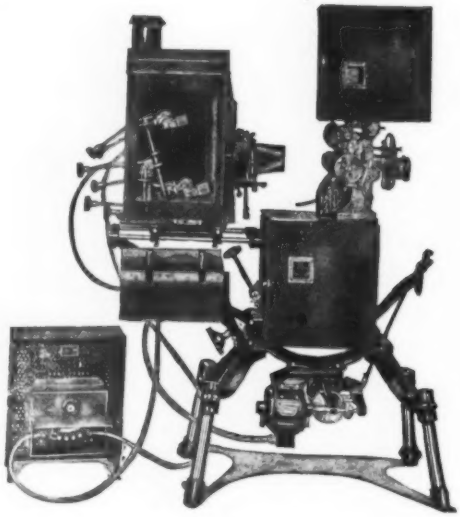

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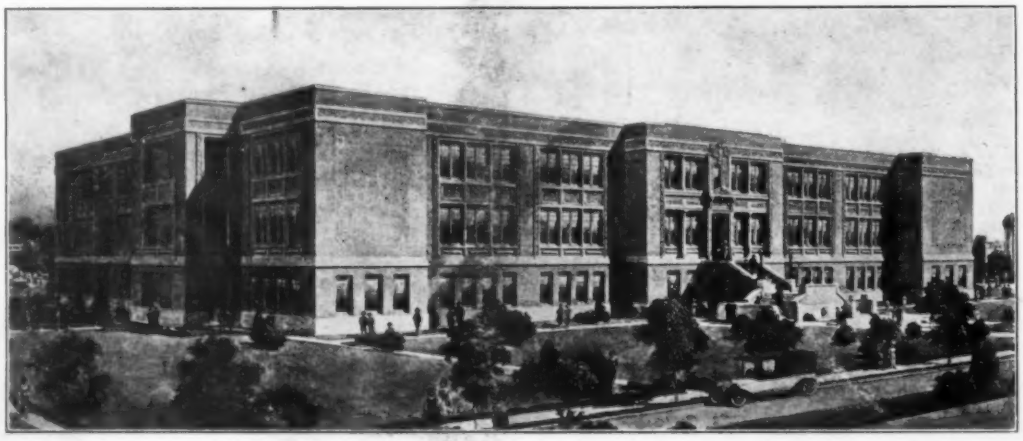

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